

TABLE OF CONTENTS

PART A - GENERAL PROVISIONS (June 1, 2003)

1. Scope...	A-1
2. Definitions...	A-1
3. Exemptions...	A-12
4. Records...	A-13
5. Inspections...	A-13
6. Tests...	A-13
7. Additional Requirements...	A-13
8. Violations...	A-13
9. Impounding...	A-13
10. Prohibited Uses...	A-13
11. Interpretations...	A-13
12. Communications...	A-14
13. The International System of Units (SI)...	A-14

PART B - ENFORCEMENT ACTIONS, PROCEDURES AND CIVIL PENALTIES (August 1, 2001)

1. Purpose and Scope...	B-1
2. Severity of Violations...	B-1
3. Enforcement Conferences...	B-2
4. Enforcement Actions...	B-3
5. Notice of Violation...	B-3
6. Civil Penalties...	B-4
7. Adjustment Factors...	B-6
8. Orders...	B-7
9. Escalation of Enforcement Sanctions...	B-9
10. Related Administrative Actions...	B-11
11. Referrals to Department of the Attorney General...	B-11
12. Public Disclosure of Enforcement Actions...	B-11

Appendices

Appendix 1 Severity Categories...	B-13
-----------------------------------	------

PART C - LICENSING OF RADIOACTIVE MATERIAL (June 1, 2003)

1. Purpose and Scope...	C-1
-------------------------	-----

Exemptions

2. Source Material...	C-1
3. Radioactive Material Other Than Source Material...	C-3

Licenses

4. Types of Licenses...	C-7
...NOTE: Attention is directed to the fact that regulation by the State of source material, radioactive material, and special nuclear material in quantities not sufficient to form a critical mass is subject to the provisions of the agreement between the State and the U.S. Nuclear Regulatory Commission and to 10 CFR Part 150 of the Commission's regulations.	

Table of Contents

General Licenses

5. General Licenses - Source Material...	C-7
6. General Licenses - Radioactive Material Other Than Source Material...	C-9

Specific Licenses

7. Filing Application for Specific Licenses...	C-16
8. General Requirements for the Issuance of Specific Licenses....	C-19
9. Special Requirements for the Use of Sealed Sources in Industrial Radiography...	C-22
10. Special Requirements for Specific Licenses of Broad Scope...	C-23
11. Special Requirements for a Specific License to Manufacture, Assemble, Repair or Distribute Commodities, Products or Devices which Contain Radioactive Material...	C-26
12. Special Requirements for a Special License for Source Material Milling...	C-38
13. Issuance of Specific Licenses...	C-38
14. Specific Terms and Conditions of License...	C-39
15. Expiration and Termination of Licenses...	C-39
16. Renewal of Licenses...	C-42
17. Amendment of Licenses at Request of Licensee...	C-42
18. Agency Action on Applications to Renew and Amend...	C-42
19. Persons Possessing a License for Source, Radioactive or Special Nuclear Material in Quantities Not Sufficient to form a Critical Mass on Effective Date of these Regulations...	C-42
20. Persons Possessing Naturally Occurring and Accelerator-Produced Radioactive Material on Effective Date of These Regulations...	C-42
21. Transfer of Material...	C-42
22. Modification, Revocation and Termination of Licenses...	C-43
23. Deliberate Misconduct...	C-44

Reciprocity

24. Reciprocal Recognition of Licenses...	C-45
---	------

Appendices

Schedule A	Exempt Concentrations of Radioactive Materials Which Are Introduced Into Products...	C-49
Schedule B	Exempt Quantities of Individual Radioactive Materials...	C-53
Schedule C	Limits for Broad Licenses...	C-55
Schedule D	Quantities of Radioactive Material Requiring Consideration of the Need for an Emergency Plan for Responding to a Release...	C-57
Appendix A	General Provisions...	C-59
Table 1	Specific License and Inspection Fees...	C-61
Appendix B	Naturally Occurring or Accelerator Produced Material.(NARM)...	C-65
Appendix C	Criteria Relating to Use of Financial Tests and Parent Company Guarantees for Providing Reasonable Assurance of Funds for Decommissioning	C-67
Appendix D	Criteria Relating to Use of Financial Tests and Self Guarantees for Providing Reasonable Assurance of Funds for Decommissioning	C-69
Appendix E	Quantities for Use With Decommissioning	C-71

PART D - STANDARDS FOR PROTECTION AGAINST RADIATION (June 1, 2003)

1.	Purpose...	D-1
2.	Scope...	D-1
3.	Definitions (As used in Part D)...	D-1
4.	Implementation...	D-3

Radiation Protection Programs

5.	Radiation Protection Programs...	D-3
----	----------------------------------	-----

Occupational Dose Limits

6.	Occupational Dose Limits for Adults...	D-4
7.	Compliance with Requirements for Summation of External and Internal Doses...	D-5
8.	Determination of External Dose from Airborne Radioactive Material...	D-5
9.	Determination of Internal Exposure...	D-5
10.	Determination of Prior Occupational Dose...	D-7
11.	Planned Special Exposures...	D-8
12.	Occupational Dose Limits for Minors...	D-9
13.	Dose to an Embryo/Fetus...	D-9

Radiation Dose Limits For Individual Members Of The Public

14.	Dose Limits for Individual Members of the Public...	D-9
15.	Compliance with Dose Limits for Individual Members of the Public...	D-10

Testing For Leakage Or Contamination Of Sealed Sources

16.	Testing for Leakage or Contamination of Sealed Sources...	D-11
-----	---	------

Surveys and Monitoring

17.	General...	D-12
18.	Conditions Requiring Individual Monitoring of External and Internal Occupational Dose	D-13

Control Of Exposure From External Sources In Restricted Areas

19.	Control of Access to High Radiation Areas...	D-13
20.	Control of Access to Very High Radiation Areas...	D-14
21.	Control of Access to Very High Radiation Areas -- Irradiators...	D-14

Respiratory Protection And Controls To Restrict Internal Exposure In Restricted Areas

22.	Use of Process or Other Engineering Controls...	D-16
23.	Use of Other Controls...	D-16
24.	Use of Individual Respiratory Protection Equipment...	D-17

Storage And Control Of Licensed Or Registered Sources Of Radiation

25.	Security of Stored Sources of Radiation...	D-19
26.	Control of Sources of Radiation not in Storage...	D-19

Table of Contents

Precautionary Procedures

27. Caution Signs...	D-19
28. Posting Requirements...	D-20
29. Exceptions to Posting Requirements...	D-21
30. Labeling Containers and Radiation Machines...	D-21
31. Exemptions to Labeling Requirements...	D-21
32. Procedures for Receiving and Opening Packages...	D-22

Waste Disposal

33. General Requirements...	D-23
34. Method for Obtaining Approval of Proposed Disposal Procedures...	D-23
35. Disposal by Release into Sanitary Sewerage...	D-24
36. Treatment or Disposal by Incineration...	D-24
37. Disposal of Specific Wastes...	D-24
38. Transfer for Disposal and Manifests...	D-25
39. Compliance with Environmental and Health Protection Regulations....	D-25

Records

40. General Provisions...	D-25
41. Records of Radiation Protection Programs...	D-25
42. Records of Surveys...	D-26
43. Records of Tests for Leakage or Contamination of Sealed Sources...	D-26
44. Records of Prior Occupational Dose...	D-26
45. Records of Planned Special Exposures...	D-26
46. Records of Individual Monitoring Results...	D-27
47. Records of Dose to Individual Members of the Public...	D-27
48. Records of Waste Disposal...	D-28
49. Records of Testing Entry Control Devices for Very High Radiation Areas...	D-28
50. Form of Records...	D-28

Reports

51. Reports of Stolen, Lost, or Missing Licensed or Registered Sources of Radiation...	D-28
52. Notification of Incidents...	D-29
53. Reports of Exposures, Radiation Levels, and Concentrations of Radioactive Material Exceeding the Limits...	D-30
54. Reports of Planned Special Exposures...	D-31
55. Reports to Individuals of Exceeding Dose Limits...	D-31
56. Reports of Individual Monitoring...	D-31
57. Notifications and Reports to Individuals...	D-32
58. Reports of Leaking or Contaminated Sealed Sources...	D-32

Additional Requirements

59. Vacating Premises...	D-32
--------------------------	------

Radiological Criteria for License Termination

60. General Provisions and Scope...	D-32
61. Radiological Criteria for Unrestricted Use...	D-33
62. Criteria for License Termination Under Restricted Conditions...	D-33
63. Alternate Criteria for License Termination...	D-34

Table of Contents

64. Public Notification and Public Participation...	D-35
65. Minimization of Contamination...	D-35

Appendices

Appendix A	Protection Factors For Respirators...	D-37
Appendix B	Annual Limits on Intake (ALI) and Derived Air Concentrations (DAC) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sanitary Sewerage...	D-39
Appendix C	Quantities ¹ of Licensed or Registered Material Requiring Labeling...	D-73
Appendix D.	Requirements for Transfer of Low-Level Radioactive Waste for Disposal at Land Disposal Facilities and Manifests...	D-83
Appendix E	Reserved...	D-97
Appendix F	Reserved...	D-99
Appendix G	Special Requirements Involving Low-Level Radioactive Waste...	D-101

PART E - RADIATION SAFETY REQUIREMENTS FOR INDUSTRIAL RADIOGRAPHIC OPERATIONS (August 1, 2002)

1. Purpose...	E-1
2. Scope...	E-1
3. Definitions...	E-1
4. Application for a Specific License...	E-5

Equipment Control

5. Performance Requirements for Industrial Radiography Equipment...	E-6
6. Limits on External Radiation Levels From Radiographic Exposure Devices, Storage Containers and Source Changers...	E-7
7. Locking of Radiographic Exposure Devices, Storage Containers and Source Changers...	E-8
8. Radiation Survey Instruments...	E-8
9. Leak Testing and Replacement of Sealed Sources...	E-9
10. Quarterly Inventory...	E-9
11. Inspection and Maintenance of Radiation Machines, Radiographic Exposure Devices, Transport and Storage Containers, Associated Equipment, Source Changers, and Survey Instruments...	E-10
12. Permanent Radiographic Installations...	E-10
13. Labeling, Storage, and Transportation...	E-11

Radiation Safety

14. Conducting Industrial Radiographic Operations..	E-11
15. Radiation Safety Officer for Industrial Radiography...	E-12
16. Requirements for Qualifications of Radiographic Personnel...	E-12
17. Operating and Emergency Procedures...	E-15
18. Personnel Monitoring...	E-15
19. Radiation Surveys..	E-16
20. Requirements for Underwater, Offshore Platform, and Lay-Barge Radiography...	E-17
21. Surveillance...	E-17
22. Posting...	E-18
23. Utilization Logs...	E-18
24. Reciprocity...	E-18
25. Radiation Safety Requirements for the Use of Radiation Machines...	E-19

Table of Contents

Record Keeping

26. Record Keeping Requirements...	E-22
------------------------------------	------

Reporting

27. Reporting Requirements...	E-24
28. Records Required at Temporary Job Sites...	E-25
29. Specific Requirements for Radiographic Personnel Performing Industrial Radiography...	E-25
30. Special Requirements and Exemptions for Radiation Machines in Enclosed Radiography...	E-26
31. Prohibitions...	E-26
32. Periodic Survey...	E-27
33. Radiographer Examination and Certification...	E-27

Appendices

Appendix A	Subjects to be Covered During the Instruction of Radiographer Trainees...	E-31
Appendix B	Items to be Covered During the Inspection of Radiographic Equipment...	E-33
Appendix C	Items to be Included in Operating and Emergency Procedures...	E-35

PART F - X-RAYS IN THE HEALING ARTS (August 1, 2001)

1. Scope...	F-1
2. Definitions...	F-1
3. General Requirements...	F-8
4. Certification of Qualified Experts...	F-14
5. General Requirements for All Diagnostic X-ray Systems...	F-17
6. Fluoroscopic X-Ray Systems...	F-19
7. Radiographic Systems Other Than Fluoroscopic, Dental Intraoral or Veterinarian Systems...	F-24
8. Intraoral Dental Radiographic Systems and Podiatric Systems...	F-29
9. Veterinary Medicine Radiographic Installations...	F-32
10. Mobile Service...	F-32
11. Mobile Vans...	F-33
12. Bone Densitometry...	F-33

Appendices

Appendix A	Information on Radiation Shielding Required for Plan Reviews...	F-35
Appendix B	Design Requirements for an Operator's Booth...	F-37
Appendix C	Information To Be Submitted by Persons Proposing to Conduct Healing Arts Screening...	F-39
Appendix D	Characteristics for Qualifying Diagnostic X-ray Experience for Radiological Physicists...	F-41
Appendix E	Characteristics for Qualifying Diagnostic X-ray Experience for X-ray Technicians...	F-43
Appendix F	X-Ray Registration Fees...	F-45
Appendix G	Quality Assurance for Facilities Performing Diagnostic X-ray...	F-47

PART G – MEDICAL USE OF RADIOACTIVE MATERIAL (June 1, 2003)

1. Purpose and Scope...	G-1
2. Definitions...	G-1
3. Maintenance of Records...	G-4
4. Provisions for the Protection of Human Research Subjects...	G-5
5. License Required...	G-5
6. Application for License, Amendment, or Renewals...	G-5
7. License Amendments...	G-6

Table of Contents

8. Notifications...	G-7
9. Exemptions Regarding Type A Specific License of Broad Scope...	G-7
10. License Issuance...	G-8
11. Specific Exemptions...	G-8

General Administrative Requirements

12. Authority and Responsibilities for the Radiation Protection Program...	G-9
13. Radiation Protection Program Changes..	G-10
14. Supervision...	G-10
15. Written Directives...	G-10
16. Procedures for Administrations Requiring a Written Directive...	G-11
17. Suppliers for Radioactive Material, Sealed Sources or Devices for Medical Use...	G-12
18. Training for Radiation Safety Officer...	G-12
19. Training for an Authorized Medical Physicist...	G-13
20. Training for an Authorized Nuclear Pharmacist...	G-13
21. Training for Experienced Radiation Safety Officer, Teletherapy or Medical Physicist, Authorized User, and Nuclear Pharmacist...	G-14
22. Recentness of Training	G-14

General Technical Requirements

23. Possession, Use, and Calibration of Instruments Used to Measure the Activity of Unsealed Radioactive Material...	G-15
24. Calibration Survey Instruments...	G-15
25. Determination of Doses of Unsealed Radioactive Material for Medical Use...	G-15
26. Authorization for Calibration, Transmission, and and Reference Sources...	G-16
27. Requirements for Possession of Sealed Sources and Brachytherapy Sources...	G-16
28. Labeling of Vials and Syringes...	G-17
29. Surveys for Ambient Radiation Dose Rate...	G-17
30. Release of Individuals Containing Unsealed Radioactive Material or Implants Containing Radioactive Material...	G-17
31. Provisions of Mobile Nuclear Medicine Service...	G-18
32. Decay in Storage...	G-18

Unsealed Radioactive Material – Written Directive Not Required

100. Use of Unsealed Radioactive Material for Uptake, Dilution, or Excretion Studies for Which a Written Directive Is Not Required...	G-19
190. Training for Uptake, Dilution, and Excretion Studies...	G-19
200. Use of Unsealed Radioactive Material for Imaging and Localization Studies For Which a Written Directive Is Not Required...	G-20
201. Permissible Molybdenum-99 Concentration...	G-20
290. Training for Imaging and Localization Studies...	G-21

Unsealed Radioactive Material – Written Directive Required

300. Use of Unsealed Radioactive Material for Which a Written Directive Is Required...	G-23
301. Safety Instruction...	G-23
302. Safety Precautions...	G-23
390. Training for Use of Unsealed Radioactive Material for Which a Written Directive Is Required...	G-24
392. Training for the Oral Administration of Sodium Iodide I-131 Requiring a Written Directive In Quantities Less Than or Equal To 1.22 Gigabecquerels (33 Millicuries)...	G-25
394. Training for the Oral Administration of Sodium Iodide I-131 Requiring a Written Directive In Quantities Greater Than 1.22 Gigabecquerels (33 Millicuries)...	G-26

Table of Contents

Manual Brachytherapy

400.	Use of Sources for Manual Brachytherapy...	G-28
401.	Surveys After Source Implant and Removal...	G-28
402.	Brachytherapy Sources Accountability...	G-28
403.	Safety Instruction...	G-28
404.	Safety Precautions...	G-29
405.	Calibration Measurements of Brachytherapy Sources...	G-29
406.	Decay of Strontium-90 Sources for Ophthalmic Treatments...	G-29
407.	Therapy-Related Computer Systems...	G-30
490.	Training for Use of Manual Brachytherapy Sources	G-30
491.	Training for Ophthalmic Use of Strontium-90...	G-31

Sealed Sources for Diagnosis

500.	Use of Sealed Sources for Diagnosis...	G-32
501.	Training for Use of Sealed Sources for Diagnosis...	G-32

Photon Emitting Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units

600.	Use of a Sealed Source in a Remote Afterloader Unit, Teletherapy Unit, or Gamma Stereotactic Radiosurgery Unit... ..	G-33
601.	Survey of Patients and Human Research Subjects Treated With a Remote Afterloader Unit...	G-33
602.	Installation, Maintenance, Adjustment and Repair...	G-33
603.	Safety Procedures and Instructions for Remote Afterloader Units, Teletherapy Units and Gamma Stereotactic Radiosurgery Units...	G-33
604.	Safety Precautions for Remote Afterloader Units, Teletherapy Units and Gamma Stereotactic Radiosurgery Units...	G-34
605.	Dosimetry Equipment...	G-35
606.	Full Calibration Measurements on Teletherapy Units...	G-36
607.	Full Calibration Measurements on Remote Afterloader Units...	G-37
608.	Full Calibration Measurements on Gamma Stereotactic Radiosurgery Units...	G-38
609.	Periodic Spot Checks for Teletherapy Units...	G-39
610.	Periodic Spot Checks for Remote Afterloader Units...	G-40
611.	Periodic Spot Checks for Gamma Stereotactic Radiosurgery Units...	G-41
612.	Additional Requirements for Mobile Remote Afterloader Units...	G-42
613.	Radiation Surveys...	G-43
614.	Five Year Inspection for Teletherapy and Gamma Stereotactic Radiosurgery Units...	G-43
615.	Therapy-Related Computer Systems...	G-43
690.	Training for Use of Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units...	G-43

Cyclotron/PET Facilities

700.	Licensing and Registration of Cyclotron / PET Facilities...	G-45
701.	Supervision of Cyclotron /PET Facilities...	G-45
702.	Other Applicable Requirements...	G-45
703.	Cyclotron / PET Facility Accelerator Requirements...	G-46
704.	Safety Considerations for Cyclotron / PET Facilities..	G-46
705.	Cyclotron / PET Facility Nuclear Pharmacy and Radiochemical Production...	G-46
706.	Rubidium-82 Generator...	G-47
790.	Training for Cyclotron / PET Facility Authorized Users...	G-47
791.	Training for Cyclotron / PET Facility Staff...	G-48

Table of Contents

Training and Experience Requirements

900. Radiation Safety Officer	G-49
910. Training for Uptake, Dilution, or Excretion Studies	G-49
920. Training for Imaging and Localization Studies	G-50
930. Training for Therapeutic Use of Unsealed Radioactive Material	G-51
932. Training for Treatment of Hyperthyroidism	G-52
934. Training for Treatment of Thyroid Carcinoma	G-52
940. Training for Use of Brachytherapy Sources	G-52
941. Training for Ophthalmic Use of Strontium-90	G-53
950. Training for Use of Sealed Sources for Diagnosis	G-54
960. Training for Use of Therapeutic Medical Devices	G-54
961. Training for Authorized Medical Physicist	G-55
980. Training for Authorized Nuclear Pharmacist	G-55
981. Training for Experienced Nuclear Pharmacists	G-55

Other Medical Uses of Radioactive Material or Radiation From Radioactive Material

1000. Other Medical Uses of Radioactive Material or Radiation From Radioactive Material...	G-57
--	------

Records

2012. Records of Authority and Responsibilities for Radiation Protection Programs...	G-58
2013. Records of Radiation Protection Program Changes...	G-58
2015. Records of Written Directives...	G-58
2016. Records for Procedures for Administrations Requiring a Written Directive...	G-58
2023. Records of Calibrations of Instruments Used to Measure Activity of Unsealed Radioactive Material...	G-58
2024. Records of Radiation Survey Instrument Calibrations...	G-58
2025. Records of Dosages of Unsealed Radioactive Material for Medical Use...	G-58
2027. Records of Leak Tests and Inventory of Sealed Sources and Brachytherapy Sources...	G-59
2029. Records of Surveys for Ambient Radiation Exposure Rate...	G-59
2030. Records of the Release of Individuals Containing Unsealed Radioactive Material or Implants Containing Radioactive Materials...	G-59
2031. Records of Mobile Nuclear Medicine Services...	G-59
2032. Records of Decay-In-Storage...	G-59
2201. Records of Molybdenum-99 Concentrations...	G-60
2301. Records of Safety Instruction...	G-60
2401. Records of Surveys After Source Implant and Removal...	G-60
2402. Records of Brachytherapy Source Accountability...	G-60
2405. Records of Calibration Measurements of Brachytherapy Sources...	G-60
2406. Records of Decay of Strontium-90 Sources for Ophthalmic Treatments...	G-61
2602. Records of Installation, Maintenance, Adjustment, and Repair of Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units...	G-61
2603. Records of Safety Procedures...	G-61
2605. Records of Dosimetry Equipment Used With Remote Afterloader Units, Teletherapy Units, and Gamma Stereotactic Radiosurgery Units...	G-61
2606. Records of Teletherapy, Remote Afterloader, and Gamma Stereotactic Radiosurgery Full Calibrations...	G-61
2609. Records of Periodic Spot-Checks for Teletherapy Units...	G-62
2610. Records of Periodic Spot-Checks for Remote Afterloader Units...	G-62
2611. Records of Periodic Spot-Checks for Gamma Stereotactic Radiosurgery Units...	G-63
2612. Records of Additional Technical Requirements for Mobile remote Afterloader Units...	G-63
2613. Records of Surveys of Therapeutic Treatment Units...	G-64
2614. Records of 5-Year Inspection for Teletherapy and Gamma Stereotactic Radiosurgery Units...	G-64

Table of Contents

Reports

3001. Report and Notification of a Medical Event...	G-65
3002. Report and Notification of a Dose to an Embryo / Fetus or a Nursing Child...	G-66
3003. Report of a Leaking Source...	G-67

PART H - RADIATION SAFETY REQUIREMENTS FOR ANALYTICAL X-RAY EQUIPMENT

(August 1, 2001)

1. Purpose and Scope...	H-1
2. Definitions...	H-1
3. Equipment Requirements...	H-2
4. Area Requirements...	H-3
5. Operating Requirements...	H-4
6. Personnel Requirements...	H-4
7. Periodic Inspection...	H-5
8. Annual Registration Fees...	H-5

PART I - RADIATION SAFETY REQUIREMENTS FOR PARTICLE ACCELERATORS

(December 1, 1990)

1. Purpose and Scope...	I-1
-------------------------	-----

License Procedure

2. License Requirements...	I-1
3. General Requirements for the Issuance of a License for Particle Accelerators...	I-1
4. Human Use of Particle Accelerators...	I-2

Radiation Safety Requirements for the Use of Particle Accelerators

5. [Reserved]...	I-2
6. Limitations...	I-2
7. Shielding and Safety Design Requirements...	I-3
8. Particle Accelerator Controls and Interlock Systems...	I-3
9. Warning Devices...	I-3
10. Operating Procedures...	I-4
11. Radiation Monitoring Requirements...	I-4
12. Ventilation Systems...	I-5

PART J - NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS; AND INSPECTIONS

(August 1, 2002)

1. Purpose and Scope...	J-1
2. Posting of Notices to Workers...	J-1
3. Instructions to Workers...	J-1
4. Notification and Reports to Individuals...	J-2
5. Presence of Representative of Licensees or Registrants and Workers During Inspections...	J-3
6. Consultation with Workers During Inspections...	J-3
7. Requests by Workers for Inspections...	J-4
8. Inspections Not Warranted; Informal Review...	J-4

Table of Contents

PART K - RADIATION SAFETY REQUIREMENTS FOR WIRELINE SERVICE OPERATIONS AND SUBSURFACE TRACER STUDIES (August 1, 2002)

- | | |
|---|-----|
| 1. Purpose and Scope... | K-1 |
| 2. Effect of Incorporation of 10 CFR Part 39 (effective date May 17, 2000)... | K-1 |

PART L - TRANSPORTATION OF RADIOACTIVE MATERIAL (August 1, 2002)

- | | |
|--|-----|
| 1. Purpose... | L-1 |
| 2. Effect of Incorporation of 10 CFR Part 71 (effective date October 1, 2001)... | L-1 |

PART N – REGULATION AND LICENSING OF TECHNOLOGICALLY ENHANCED NATURALLY OCCURRING RADIOACTIVE MATERIALS (TENORM) (August 1, 2002)

- | | |
|---|-----|
| 1. Purpose... | N-1 |
| 2. Scope... | N-1 |
| 3. Definitions... | N-1 |
| 4. Exemptions... | N-2 |
| 5. Standards for Radiation Protection for TENORM... | N-3 |
| 6. Protection of Workers During Operations... | N-3 |
| 7. Unrestricted Use and Conditional Release... | N-3 |
| 8. Disposal and Transfer of Waste for Disposal... | N-4 |
| 9. Prohibition... | N-4 |

General License

- | | |
|------------------------|-----|
| 10. General License... | N-4 |
|------------------------|-----|

Specific Licenses

- | | |
|---|------|
| 11. Specific Licenses... | N-6 |
| 12. Filing Application for Specific License... | N-6 |
| 13. Requirements for issue of Specific Licenses... | N-6 |
| 14. Safety Criteria for Products... | N-8 |
| 15. Table of Doses... | N-9 |
| 16. Issuance of Specific Licenses... | N-9 |
| 17. Conditions of Specific Licenses Issued Under N.13.... | N-10 |
| 18. Expiration and Termination of Specific Licenses... | N-11 |
| 19. Renewal of Specific Licenses... | N-13 |
| 20. Amendment of Specific Licenses at Request of Licensee... | N-13 |
| 21. Agency Action on Applications to Renew and Amend Specific Licenses... | N-13 |
| 22. Modification and Revocation of Specific Licenses... | N-13 |
| 23. Agency Action to Remove an Authorized User or a Radiation Safety Officer... | N-14 |
| 24. Record Keeping Requirements for Site Reclamation... | N-15 |
| 25. Reciprocal Recognition of Specific Licenses... | N-15 |
| 26. Financial Assurance Arrangements... | N-16 |
| 27. Effective Date... | N-16 |

Appendices

- | | |
|---|------|
| Appendix A Acceptable Surface Contamination Levels for TENORM | N-17 |
|---|------|

Table of Contents

PART X – THERAPEUTIC RADIATION MACHINES (August 1, 2001)

1. Scope...	X-1
2. Definitions...	X-1
3. Administrative Requirements...	X-4
4. General Requirements...	X-5
5. Quality Management Program...	X-7
6. Therapeutic Radiation Machines of Less Than 500kV...	X-7
7. Therapeutic Radiation Machines, Photon Therapy Systems (500 kV and Above) and Electron Therapy Systems (500 kV and Above)...	X-12
8. Calibration of Survey Instruments...	X-21
9. Shielding and Safety Design Requirements...	X-22

Appendices

Appendix A Information on Radiation Shielding Required For Plan Reviews...	X-23
Appendix B Quality Management Program...	X-27
Appendix C Alternative Quality Management Program...	X-31